

Notice of Allowability**Application No.**

10/046,463

Applicant(s)

ANDERSON ET AL.

Examiner

Michael B. Holmes

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to December 23, 2004.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☒ The drawings filed on 23 October 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |



UNITED STATES PATENT AND TRADEMARK OFFICE

P.O. Box 1450, Alexandria, Virginia 22313-1450 – www.USPTO.GOV

Examiner's Detailed Office Action

1. Applicant's arguments are persuasive. Claims 1-33 are allowed.

REASONS FOR ALLOWANCE

2. The following is an Examiner's statement for reasons for allowance:
3. The closest prior art *Hirosawa et al.* (USPN 5,995,729), *Sisk et al.* (USPN 6,366,644) and *Grimsrud* (USPN 5,726,913) do not teach or render obvious applicant's claimed invention. In particular, as pointed out below, the prior art lacks certain features and the combination as specified in the respective claims.
4. With regards to claim 1 *Hirosawa et al.*, *Sisk et al.*, and *Grimsrud* do not disclose ... developing a design for the system and performing an automated loop comprising implementing the design, analyzing operation of the design after said implementing, and modifying the design based on results of said analyzing.
5. With regards to claim 13 *Hirosawa et al.*, *Sisk et al.*, and *Grimsrud* do not disclose ... developing a design for the data storage system and performing an automated loop comprising implementing the design, analyzing operation of the design after said implementing, and modifying the design based on results of said analyzing.

Art Unit: 2121

6. With regards to claim 25 *Hirosawa et al.*, *Sisk et al.*, and *Grimsrud* do not disclose ... developing a design for the data storage system, implementing the design, forming a trace of storage system events, forming workload characterization from the trace, applying the workload characterization to models of components of the data storage system, wherein said applying indicates utilization of a component of the data storage system, and modifying the design in response to the utilization indicated by said analyzing.


Correspondence Information

7. Any inquires concerning this communication or earlier communications from the examiner should be directed to Michael B. Holmes, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-3686 or facsimile transmission (571) 273-3686 or email Michael.holmesb@uspto.gov.

If you need to send an Official facsimile transmission, please send it to (703) 746-7239.

If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, Anthony Knight, may be reached at (571) 272-3687.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.


Anthony Knight
Supervisory Patent Examiner
Group 3600

Michael B. Holmes
Patent Examiner
Artificial Intelligence
Art Unit 2121
United States Department of Commerce
Patent & Trademark Office

Application/Control Number: 10/046,463

Page 4

Art Unit: 2121

Friday, March 11, 2005

MBH